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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,610	11/28/2001	Kuninori Kawabata	100353-00086	9276

7590 07/05/2005  
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EXAMINER


PHAM, LY D

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/994,610	Applicant(s) KAWABATA ET AL.	
	Examiner Ly D. Pham	Art Unit 2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
     4a) Of the above claim(s) 7-20 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-6 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**FINAL ACTION**

**DETAILED ACTION**

1. Applicant's Amendment filed May 16, 2005 has been entered. Claims 1 – 6 have been amended.

***Drawings***

2. Figures 1A, 1B, and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Response to Arguments***

3. Applicant's arguments filed May 16, 2005 have been fully considered but they are not persuasive in view of the grounds for the rejection of the amended claims set forth below.

***Claim Rejections - 35 USC § 112***

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4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1 – 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

**Claim 1** discloses a semiconductor device comprising a **data supply circuit** ..., which is nowhere found in the specification and the figure drawings.

**Claim 5** discloses the semiconductor device as claimed in claim 3, further comprising a precharge circuit precharging the first data line, the second data line, and the test-dedicated data line.

With reference to either of fig. 2 or fig. 4, the above claimed limitation is nowhere found because the precharge circuit 12 in fig. 2 is shown to precharge only the test-dedicated bus line pair TDB0 and TDB1, while the precharge circuit 62 in fig. 4 is shown to precharge only the data lines DB0 – DB3 and test dedicated line TDB0 only. There is not a third component in either one of the two figures which indicate the precharge circuit precharging the three components: the first data line, the second data line, and the test-dedicated line.

These are considered new matter.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 – 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's Admitted Prior Art (AAPA).

Regarding **claims 1 and 2**, AAPA discloses a semiconductor device (fig. 2 and specification pages 1 – 6), comprising:

a memory cell array (fig. 2, array 22) configured to supply two signals that are complementary with each other (fig. 2, complementary signal lines RDc and RDt) to represent a single value in a first operation mode (addressed bit datum of a memory cell in array 22 in a normal operation mode, spec page 2, line 25 – page 3, line 4) and capable of assuming either different signal levels or an identical signal level in a second operation mode (second mode being test mode, different signals having no error or identical signal level indicating error, spec page 4, lines 3 – 15);

a first data line (fig. 2, one of data bus lines DB0 – DB3);

a second data line (fig. 2, test dedicated bus 1 TDB1); and

a drive circuit (fig. 2, drive circuit 10) configured to set, in the first operation mode (normal mode), the first data line to a signal level responsive to said single value represented by the two complementary signals (output data from the first data line responsive to the complementary signals RDt and RDc), and configured to set, in the

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second operation mode (test mode), the first data line to a signal level responsive to one of the two signals (according to fig. 2, regardless of operation mode, data bus lines DB0 – DB3 still responsive to signal RDt from sense amplifier 24) and the second data line to a signal level responsive to another one of the two signals (fig. 2, when test signal TST is high, TDB1 is responsive to the other signal RDc) after precharging the first second data lines (fig. 2, precharge signal PCG to precharge circuit 12 to precharge line TDB1 through transistor 46).

Regarding **claim 3**, AAPA also disclose the semiconductor device as claimed in claim 3, further comprising a test-dedicated line (fig. 2, test dedicated line TDB0).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See references cited.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly D. Pham whose telephone number is 571-272-1793. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on 571-272-1777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ly Pham   
June 24, 2005

  
**HOAI HO**  
**PRIMARY EXAMINER**